

The Relationship between Team Cohesion and Performance in Basketball League in Kenya

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Abstract The purpose of this study was to establish the relationship between cohesion (social and team) and performance in Basketball league in Kenya. It was hypothesized that gender and team size will not mediate the relationship between cohesion and performance. Data was collected through questionnaire from 130 participants who were playing in the Kenyan basketball league in 2007. One way ANOVA, Kruskal –Wallis and Pearson product moment were used to test the formulated hypothesis. Results revealed that 75% of the players did not have players they disliked in the team, 96% of the players celebrate wins as a team and 76% of the players loose as a team. Teams with high levels of team cohesion won more frequently as opposed the teams which lost more matches. There were no significant differences ($p>0.05$) on cohesion and performance in basket ball between males and females, and team size. However, it was concluded that team size affected cohesion and recommends that coaches need to consider ways of enhancing cohesion in their teams, and more aptly, reflect on the team composition. Additionally, future studies should focus on cohesion and demographic variables (age, marital status, social-economic status).

Keywords Cohesion, Basketball, Team size, Performance

1. Introduction

Team cohesion is defined as the total field of forces causing members to remain in group [1]. Cohesion is the degree and the tendency of team members to stick together in unity, solidarity, and pulling together to achieve a certain objective [2]. There are two types of cohesion: task cohesion and social cohesion. Task cohesion refers to the general orientation toward achieving goals and objectives as a group while social cohesion consists of a general orientation toward developing and maintaining social relationships within a group [2].

Research studies indicate that highly cohesive teams are likely to be highly successful teams [3]. It is certain that a highly cohesive team would be more likely to achieve more than a team whose members' exhibit discontent, conflict and disruption [4]. Therefore, a coach and the team must be concerned with both task cohesion and social cohesion. This is because increase in both task and social cohesion will ultimately lead to success. Success is an important aspect of task cohesion, therefore, the more success a team experiences, the higher the cohesion [3]. Investigations on the influence of team composition on team performance,

often assume that this relationship is mediated by the strength (intensity) of the interpersonal relations (social cohesion) among team members.

2. Previous Studies

The degree of interaction in a particular sport is an important factor in team cohesion and Cox [5] suggested that sports could be categorized into high interaction in team sports (e.g. basketball, rugby, football) and low interaction individual sports (e.g. swimming, shooting, and cycling). Basketball is a group sport and highly interactive where members of the teams are expected to have a common identity that distinguishes them from other team and players must have the qualities of high interaction in order for teams to return good performance outcomes.

One of the earliest studies supporting relationship between cohesion and performance examined the degree of team cohesion and the number of yards gained on each offensive play for the Ohio State Buckeyes football team [6]. Results showed that team cohesion and performance (i.e. yards gained) were related under conditions of high drive.

Ruder and Gill [7] demonstrated the effect of single game outcomes (in both intramural and intercollegiate women's volleyball teams) upon team cohesion. The study showed that team cohesion is not a static and stable phenomenon but seems to change throughout the season and further showed that winning teams had a rise in group's cohesion following

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the game, while losing teams suffered a decline.

Another aspect which has been reported to affect team performance is collective efficacy [8, 9]. The key aspects comprising collective efficacy are shared beliefs among the team, coordinative capabilities between members, collective resources for task success, and situational specificity of demands [10].

Paskevich, Brawley, Dorsch *et al* [11] investigated the cohesion collective efficacy relationship in university and club volleyball teams and results showed that there was a positive relationship between task cohesion and collective efficacy. Similarly, Kozub and McDonnell, [12] found that task cohesion is positively associated with collective efficacy among rugby-union teams. Heuze, Raimbault and Fontayne [13] found athletes' perceptions of task cohesion were positively related with their perceptions of collective efficacy, although another positive relationship was found between social dimension of cohesion and collective efficacy. Ronayne [14] found a significant relationship between two dimensions of group cohesion (task and social cohesion) and collective efficacy at the early season and late season.

High group cohesion has been associated with successful sport performance in basketball [15], soccer [16], and baseball [17, 18]. Similarly, Grieve, Whelan and Myres [19] found that performance has more impact on cohesion than cohesion has on performance. Research studies have indicated that following failure, groups high in collective efficacy increased their efforts and performance; whereas groups low in collective efficacy showed deterioration in performance [20-22]. Therefore, within the area of team sport, both collective efficacy and group cohesion would appear to share some commonality in influencing sport performance.

Carron, Bry and Eys [23] examined the relationship between task cohesion and team success in elite basketball and football teams utilizing the Group Environment Questionnaire (GEQ). Scores in both categories were highly correlated with team success for both sports, success being defined as match results over the season, excluding play-offs. The teams with the highest 'team cohesion' scores had the best season won: loss percentage records.

A number of local studies have been done in soccer on factors that have an effect on teams performance, and their areas of focus including tactical and technical factors, lack of coaching programs and poor preparation for international competitions, lack of international visits to gain experience, financial constraints, haphazard residential training, lack of professional players and poor state of sports administration [24-28]. Therefore this study was inaugural in unearthing the nexus between cohesion and performance in Basketball. More aptly, not a single empirical study has been conducted in basketball in Kenya.

Thus the purpose of this study was establish the degree of social and task cohesion in the teams, teams' cohesiveness and their win/loss records. The findings of this study provide more knowledge to managers, coaches and / or sport psychologists on the significance of task and social cohesion

and team performance. The team managers and coaches can utilize the findings of this study to develop team-building strategies to improve team cohesion.

3. Methodology

3.1. Research Design

This study adopted the ex post facto research design. This research design was deemed appropriate for the study on the relationship between team (social and task) cohesion on performance of basketball teams in the National Classic League in Kenya 2007 season. The independent variables were teams' cohesion (social and task), gender, team size while the dependant variable was the performance (win/loss) in the National Classic League in Kenya 2007 season.

3.2. Sample Size

The target population comprised of both male and female basketball players in the National Classic League in Kenya 2007 which had 20 teams (10 male and 10 female). Stratified sampling procedure was used to select basketball athletes of not less than two years experience in clubs that participated in the National Classic League in Kenya 2007 season. In each stratum, six players were then randomly sampled from each team to constitute a total sample size of 130 participants.

3.3. Instrument for Data Collection

A self administered Questionnaire or a modified version of Carron, Widmeyer and Brawley [2] was utilized for data collection. The questionnaire had three sections where section A sought information pertaining to players' demographic characteristics of age, gender and playing experience. Section B captured social interactions with other players (social cohesion) and Section C dwelt with performance in basketball league win and losses (measures of task cohesion). Items on social cohesion were weighted on five point Likert scale of strongly agree, agree, undecided, disagree and strongly disagree. These were scored as 5,4,3,2 and 1 respectively. Questionnaires were administered in training venues with the assistant of coaches and team managers. The instrument was pre-tested with Kenyatta University basketball team. Thirty players from the university basketball team took part in pilot study. They were subjected test-retest procedures with a time interval of two weeks and a reliability index of 0.82 was returned which was considered adequate for the study.

3.4. Data Analysis

The data obtained was subjected to statistical analysis using the Statistical Package for Social Sciences (SPSS) and tabulated in form of percentages, means, and standard deviation. One – way analysis of variance (ANOVA) test, Kruskal Wallis and Pearson Product Moment Correlation for were used to test the hypotheses. The level of significance was set at $p \leq 0.05$.

4. Results

The players’ distribution based on gender and age is shown in Table 1.

Table 1. Gender and Age characteristics of the participants (n=130)

	N	%
Gender		
Males	70	54
Females	62	46
Age (Years)		
20-21	13	10
22-23	22	16.9
24-25	21	16.2
26-27	29	22.3
28-29	24	18.5
30-31	17	13.1
32-33	4	0.03
Total	130	100
No. of players in the team		
12-15	116	89
16-20	14	11

Table 1 show that most 70 (54%), of the respondents were males, while females were 62 (46%). The participants had their age range, mean and standard deviation of 20 to 33 years, 27.07 ± 3.04 respectively. Majority 116(89%) of the players were playing in teams of 12 to 15 players while 14(11%) were in teams which had a membership of 16 to 20 years.

4.1. Social Cohesion

The extent of social cohesion among the players is

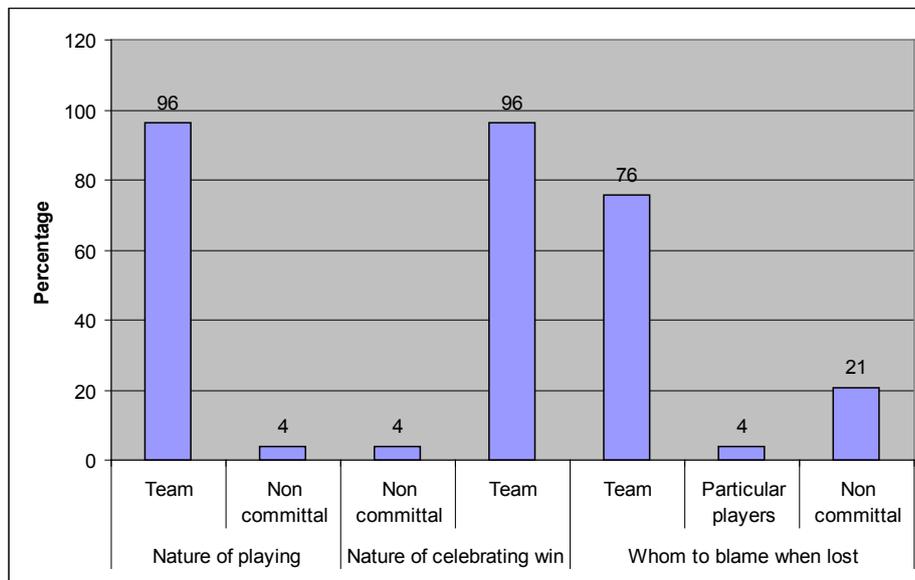


Figure 1. Nature of playing and win/loss celebrations as a measure of social cohesion

presented in Table 2.

Table 2. Number of Friends the Players had in the team versus number of players

Number of Friends a player has in the team	Number of players				Total
	12	20	22	23 - 25	
2	13	1	0	1	13
3	11	0	2	0	6
4	10	1	3	1	10
6	15	1	0	1	5
7	15	0	0	0	15
10	10	0	0	0	12
11	6	0	0	0	6
12	0	0	0	0	16
20	0	0	0	0	2
21	0	0	0	0	3
22	0	0	0	0	2
30	0	0	0	0	1
Total	80	3	5	3	91

Table 2 shows that the more the number of players in a team, the less the friends (i.e. social cohesion) implying that the strength of friendship among players increases with decrease in the number of players per team. In addition, the players were also asked whether there are any players they disliked in their teams. Results showed that 27(21%) of players indicated that there are players they disliked in their teams while 98 (75%) indicated that there were no players they disliked in the team.

4.2. Team Cohesion

The study assesses the extents to which team players reacted to a win or a loss. Their responses are shown in Figure 1.

Table 3. Summary of One way ANOVA on team cohesion and team performance in basketball teams in the National Classic League

		Sum of Squares	df	Mean Square	F	Sig.
Won	Between Groups	282.07	12	23.50	3.73	.000
	Within Groups	529.01	84	6.29		
	Total	811.09	96			
Lost	Between Groups	233.78	12	19.48	6.38	.000
	Within Groups	237.97	78	3.051		
	Total	471.75	90			

As illustrated in figure 1, majority of respondents affirmed that they played as a team 124 (96%), celebrate as a team 124 (96%) and loose as a team 99 (76%), and this gives the evidence of strong team cohesion. Majority of players in the teams have the desire to help each other, 81(62%), are happy with the amount of influence they have on their teams 66(51%) and assume responsibility for poor performance 64(49%).

One way ANOVA was used to test whether there was a significance effect of team cohesion on team performance in basketball teams in the National Classic League and the results are presented in Table 3.

The ANOVA results were significant for won matches ($F_{12,84} = 3.73$, $p < 0.00$) and lost matches ($F_{12,78} = 6.38$, $p < 0.00$). Post hoc tests revealed that the teams with a higher mean (23.50) of team cohesion between the players won more frequently than a team which lost with a mean (19.48). This implied that winning or losing depended so much on whether the team was cohesive or not, with high team cohesion most likely to lead to a win and a loss being associated with low team cohesion.

The results of the Kruskal-Wallis Test for the difference in cohesion between male and female basketball teams' players in the National Classic League showed that there was no significance difference ($r = 0.027$, $df = 1$, $p > 0.87$) in cohesion between male and female basketball teams' players in the National Classic League in Kenya 2007 season. Pearson product moment correlation test was performed to establish the relationship between teams' size and the extent of cohesiveness in basketball teams in the National Classic League. The results of analysis showed that there was a significant relationship between team size and team cohesion ($r = 0.196$, $p < 0.023$) between teams' size and the extent of cohesiveness in basketball teams in the National Classic League.

5. Discussion

Previous research has been conducted in order to identify and explore personal attributes which are associated with performance in sports. Attributes such as self-esteem, pride and competition within a team and attitudes towards other players in a team have both negative and positive effects [15]. Findings from the study revealed that social cohesion thrived in teams which took part in the study. Bray and Whaley [29]

opined that togetherness as a feature of team's environment along with communication is important features that need to be addressed in order to achieve social cohesion. However, some players in the current study indicated they disliked other players in their teams due to laziness, pride and selfishness. Selfish players may not trust others as equal performers [30] compromising the output of the team since some players take themselves as better players than their partners. Similarly, laziness could be another influence of team performance. Players in team sports need to have same urge in leading their teams to win matches. However, some players have been found to relax and depend on the efforts of other to claim success [11]. Players' negative interaction in a team hinders social cohesion thus compromising good performance [19]. This attribute may negatively affect social cohesion needed for successful performance in a team. Players in more cohesive teams may hold stronger shared beliefs in their competence, which in turn may lead to greater team success.

Zaccaro *et al.*, [10] have posited that the social nature of the group influences how shared beliefs develop. Carron *et al.*, [3] suggested that 'task' cohesion is more important for team success than 'social' cohesion and thus it is possible for team mates to dislike each other and still win. A team that celebrate its success and embraced a loss collectively are more compact than those that only acknowledged winning alone [7]. It further showed that winning teams had a rise in group's cohesion following the game, while losing teams suffered a decline. Indeed, the cohesiveness of the team is likely to influence the team's performance and more so the player's mood.

Studies have shown that in larger teams cohesiveness typically suffers due to varied levels of personalities and expectations within members of a team. This makes sense in that members of larger teams may find it more difficult or intimidating to socialize with each other, or indeed, simply do not have the time or opportunity to forge bonds with everyone. Typically then, one should expect the magnitude of the cohesion-performance effect to be greater in smaller teams and lower in larger teams. Findings of this study revealed that team size affected cohesion and performance in favor of smaller teams. Ruder and Gill [7] emphasized that winning teams had a rise in groups cohesion while losing teams suffered a decline. Indeed, the issue of team size and teams' cohesion indicated that the strength of friendship

among players increases with decrement in the number of players per team.

Results revealed that the large size of the teams had a significant effect on the relationship on the extent of social cohesion and it was easier to promote social cohesion in smaller teams than large teams. Friendships within a group would promote social cohesion and team performance. Myres [19] reported that relations in a team hinder social cohesion compromising good performance. However, in the present study it was indicated that there were some players who were disliked within the teammates which negatively affected team cohesion and good performance. There was positive task cohesion in a team where team mates celebrated wins and losses of matches together. There was no significant relationship between male and female respondents with team cohesion. Ruder and Gill [7] reiterated that teams that celebrated their success and embraced a loss collectively were more compact than those who only acknowledged winning alone.

6. Recommendations

Based on the conclusions of the study it is recommended that coaches and players need to consider the factor of cohesion in their teams as it is most likely to be related to win-loss patterns in team sports. A consideration should also be emphasized on the size of the teams as large teams are likely to be less cohesive hence more chances of loss in matches. On the other hand, small teams are highly cohesive and have high chances of winning. Basketball teams are therefore encouraged to have a limited number of players so as to increase the cohesiveness of players. Secondly, institutions that have players should develop policies through engaging the players, coaches and other interested parties. It should also be noted that cohesion is a factor that cuts across gender, hence all teams must be build up on it as there are no gender differences in this context. Further studies should be done at lower levels of Basketball competitions such as secondary schools, universities and colleges. Studies on skill acquisition and cohesion (Social interaction) which apply to the teams will be worthwhile.

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